

REMARKS

The present Amendment is in response to the Office Action mailed October 6, 2009. Claim 1 is amended. Claims 1-54 are now pending in view of the above amendments. Applicants note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. Applicants also note that the remarks presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited reference. Such remarks, or a lack of remarks, are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicants: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicants reserve the right to challenge the purported teaching and prior art status of the cited references at any appropriate time. Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks.

Rejection Under 35 U.S.C. § 112, Second Paragraph

The Office Action rejected claim(s) 1 and 3-18 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has been amended as required by the Examiner to overcome the rejection of claims 1 and 3-18 under § 112, second paragraph.

Rejection Under 35 U.S.C. §102

The Office Action rejected claim(s) 1-5, 7-13, 19-29, 33-37, 39-45, and 51-54 under 35 U.S.C. § 102(b) as being anticipated by GB Patent No. 708,342 (*Wienand*).

Because *Wienand* does not teach or suggest each and every element of the rejected claims, Applicants respectfully traverse this rejection in view of the following remarks.

Embodiments of the invention not only relate to compacting a piece of wood but also to compacting wood-based pieces or wooden workpieces. As noted in the specification (see e.g., ¶47, Fig. 2), "wood-based" pieces or wooden workpieces have been made from wood and therefore have wood cells. Claim 1, for instance recites "a wooden workpiece", where this is defined at one point in Claim 1 to include "materials similar to wood, bamboo, reed, other wood-based materials, plywood, chipboards, wood-containing paper, and paper enriched with resins." Further, the wooden workpieces recited in claim 1 are not necessarily composite but may also be isolated from composition and, for example, connected via a resin substance as recited in Claim 1, "paper enriched with resins".

The core of the invention is that the cell structure of the wooden workpiece is destructed (claim 1 recites "a heating and a destruction of the cell structure"), and at least partial liquefaction of one or more components of the cells of the piece of wood or the wood-based piece is conducted (claim 1 recites placing the wooden workpiece under pressure until a thermoplastic adhesive substance coming from the wooden workpiece is formed (see e.g., specification on page 3, second and third complete paragraphs). Cells of the wooden workpiece are compacted only when this partial liquefaction occurs or after the thermoplastic adhesive substance is formed. Compaction occurs, for instance, upon cooling down the wooden workpiece.

Claim 1 recites, for instance, "heating a surface of the wooden workpiece in at least partial areas--while preventing the entry of oxygen--by supplying energy to the surface, which energy supply produces a frictional relative motion on the wooden workpiece and hence a heating and a destruction of the cell structure thereof and placing the wooden workpiece under pressure until a thermoplastic adhesive substance coming from the wooden workpiece is formed." Claim 1 then recites that while cooling, the surface and a volume area beneath the surface under application of pressure is compacted.

Wienand, in contrast, relates to surface refinement by compacting and concurrent or subsequent distortion by applying heat or pressure. A frictional relative movement, as recited in claim 1, is not referred to in *Wienand* and cannot be achieved with the device presented in *Wienand*. More specifically, *Wienand* discloses that the frame parts, which are movable in relation to each other, are kept at a distance from each other by springs 21 when no pressure is exerted (see page 3, right column, first two lines, see also page 4, left column, lines 39-41). These springs keep the frame parts separated when no pressure is exerted – which is contrary to producing a friction relative motion on the wooden workpiece as recited in claim 1.

Therefore, while a pulsating pressure is exerted on the work piece that is inserted between the frame parts in *Wienand*, it is not a frictional relative movement, as friction could occur only if the work piece was moved further by the belts 18 and 19 while the pressure is exerted. However, *Wienand* discloses, as previously mentioned, that the frame parts are moved apart and kept at a distance to each other during times without pressure and when the piece is pushed forward. Thus, *Wienand* does not disclose a frictional relative movement as recited in claim 1 because the piece is pushed forward during times without pressure.

Another essential difference is that, according to *Wienand*, no destruction of the cell structure occurs, and thus, no thermoplastic adhesive substance is formed. Also, *Wienand* does not disclose such a method of procedure. In other words, there is no discussion of the destruction of the cell structure of the wooden workpiece and thus there is no disclosure of placing the wooden workpiece under pressure until a thermoplastic adhesive coming from the wooden workpiece is formed.

In addition, the elements can occur in stations. The first station is followed by a second station, which provides for compacting. Claim 19, for example, recites stations: a first station comprising an energy-supply means, a second station comprising a compaction means, and a third station comprising a cooling means. In the first station, the wooden workpiece is oriented toward a surface of the wooden workpiece such that the surface can be heated. The second station provides for compacting.

These elements of claim 19 are not disclosed in *Wienand*. More specifically, *Wienand* shows two stations only, where one is for heating and one for cooling, and where pressure is created in both stations concurrently – in contrast to the elements of claim 19 as arranged in claim 19.

For at least these reasons, Applicants respectfully submit that claims 1 and 19 are patentable over the cited art. Claims 2 includes at least some generally similar elements and is patentable for at least the same reasons. The dependent claims rejected under § 102 are patentable for at least the same reasons.

Rejection Under 35 U.S.C. § 103

The Office Action rejected claim(s) 6, 14-18, 30-32, 38, 46-50 and 53-54 under 35 U.S.C. § 103(a) as being unpatentable over *Wienand* in view of U.S. Patent No. 6,047,751 (*An*). Applicants traverse the Examiner's rejection for obviousness on the grounds that the references – either individually or in combination – fail to teach or suggest each and every element of the rejected claims.

Because claims 1, 2, and 19 are patentable as discussed herein and because *An* has not been shown to remedy the deficiencies of *Wienand*, Applicants respectfully submit that the dependent claims rejected under § 103 are patentable over the cited art.

CONCLUSION

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney. In view of the recent USPTO initiative regarding compact prosecution, Applicant respectfully invites the Examiner to contact the undersigned at his earliest convenience in the instance that additional impediment exists to the prompt allowance of this case.

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Respectfully submitted,

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